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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/759,421 | 01/20/2004 | Chikuni Kawakami | 0879-0425P | 8089 |
| 2292 | 7590 | 09/06/2005 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | SUTHAR, RISHI S | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2851 | |
| DATE MAILED: 09/06/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,421

Applicant(s)

KAWAKAMI, CHIKUNI

Examiner

Rishi Suthar

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 13-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>20040120</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being unpatentable by Koay et al. (U.S. Patent Application Publication No. US 2002/0047130 A1).

Regarding claim 1, Koay et al. teaches a lighting apparatus (200) in Fig. 2 comprising a reflecting surface (222) for reflecting light formed on a circuit board (210) (Par. [0031, lines 1-3), an LED light source (230) for emitting illumination light with a light-emitting diode, mounted on a part of said reflecting surface (Par. [0047], lines 1-5), and a reflector (224) for reflecting ahead the light emitted from said LED light source (Par. [0011], lines 1-3), mounted on said circuit board so as to surround said LED light source and have the opened rear thereof closed by said reflecting surface, as shown in Fig. 2.

Regarding claim 2, Koay et al. teaches the reflecting surface can be formed by gold plating (Par. [0011], lines 3-6).

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Regarding claim 5, Koay et al. teaches an optical element (dome 260) for expanding and flooding ahead the light emitted from said LED light source is placed on said reflector (Par. [0028], lines 8-11).

3. Claims 6 and 10 are rejected under 35 U.S.C. 102(b) as being unpatentable by Reisenauer et al. (U.S. Patent No. 6,161,910).

Regarding Claim 6, Reisenauer et al. teaches a lighting apparatus (10) in Fig. 3 having an LED light source for emitting illumination light with a light-emitting diode (26), and a reflector (24, 25) in Fig. 1 and Fig 3 (Col. 3, lines 61-63) for reflecting ahead the light emitted from said LED light source, said reflector placed so as to surround the rear side and side surface side of said LED light source, and said LED light source is placed clear of an internal reflecting surface of said reflector, as shown in Fig. 2.

Regarding claim 10, Reisenauer et al. teaches in Fig. 1-2 that said LED light source has a lead terminal put through a hole provided on said reflector and is joined with a predetermined pad of a circuit board (22) so as to mount said LED light source on said circuit board (Col. 3, lines 37-40).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 3, 4, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koay et al. (U.S. Patent Application Publication No. US 2002/0047130 A1) in view of Kitano et al. (U.S. Patent Application Publication No. US 2003/0216151 A1).

Regarding claim 3, Koay et al. teaches the invention as claimed above. Koay et al. does not teach the said LED light source is a surface-mounted white chip LED and is surface-mounted on said reflecting surface. Kitano et al. teaches a LED light source which can use a white colored chip LED as the light source (Par. [0047], lines 2-4). It would be obvious to one of ordinary skill in the art at the time of applicant's invention to modify the light source of Koay et al. to use a white colored surface-mounted chip LED as taught by Kitano et al. since a white light can capture a scene's true color when the light source is used as a flash for a camera.

Regarding claim 4, Koay et al. teaches the invention as claimed above. Koay et al. does not teach the LED light source is comprised of three types of LED light sources for emitting red light (22a), green light (23a), and blue light (24a), and the LED light source for emitting the light in each color is radially placed as shown in Fig. 3. It would be obvious to one of ordinary skill in the art at the time of applicant's invention to modify the light source of Koay et al. to use an RGB LED light source as taught by Kitano et al. so as to use the light source to perform multiple functions on a mobile phone, such as illuminating a white flash for a camera, or flash a single color LED as an indication for an incoming call (Kitano et al., Par. [0013, 0014]).

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Regarding claim 11 and 12, Koay et al. teaches the lighting apparatus as claimed above. Koay et al. does not teach an electronic flash apparatus of a camera or a camera comprising the lighting apparatus. Kitano et al. teaches an electronic flash of a camera and a camera using an LED light source. It would be obvious to one of ordinary skill in the art at the time of applicant's invention to use the light source of Koay et al. in the electronic flash apparatus and camera of Kitano et al. since the light source of Koay et al. provide a wide viewing angle and thus would be suitable for an electronic flash apparatus of a camera.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reisenauer et al. (U.S. Patent No. 6,161,910) in view of McDermott (U.S. Patent No. 4,947,291).

Reisenauer et al. teaches a lighting apparatus as claimed above. Reisenauer et al. does not teach that the LED light source is comprised of three types of LED light sources for emitting red light, green light, and blue light. McDermott teaches an lighting apparatus where the LED source is comprised of three types of LED sources for emitting red light, green light, and blue light (Col. 4, lines 4-6) light in each color is radially placed as shown in Fig. 10. It would be obvious to one of ordinary skill in the art at the time of applicant's invention to modify the lighting apparatus of Reisenauer et al. to include RGB light sources to provide a white light so as to not impair the sensitivity of the eye's receptors (McDermott, Col. 4, lines 6-10).

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7. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reisenauer et al. (U.S. Patent No. 6,161,910) in view of Sommers (U.S. Patent Application Publication No. US 2003/0180037 A1).

Reisenauer et al. teaches the lighting apparatus as claimed above.

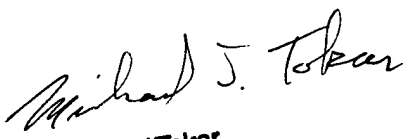
Reisenauer et al. does not teach an electronic flash apparatus of a camera or a camera comprising the lighting apparatus. Sommers teaches an electronic flash apparatus (4) of a camera and a camera (1) which uses the flash apparatus in Fig. 1 (Par. [0020]). It would be obvious to one of ordinary skill in the art at the time of applicant's invention to use the lighting apparatus of Reisenauer et al. in the electronic flash apparatus of a camera and a camera of Sommers since the color temperature of the lighting apparatus Reisenauer et al. is typical for an electronic flash apparatus of a camera.

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Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RS


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